Solar energy generation

2723. PROF. P.J. KURIEN: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the amount of solar energy generated and the approximate cost of its generation per unit;

(b) whether solar energy is commercially viable, if so, the details thereof and if not, the reasons therefor; and

(c) whether Government is supporting any research for bringing down the cost of generation, if so, the details thereof and results achieved?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) About 7.7 lakh solar lanterns, 5.1 lakh solar home lighting systems, 82,500 solar street lighting systems, 7247 solar water pumping systems, stand-alone & grid connected solar photovoltaic (SPV) power plants of about 10 MW peak aggregate capacity, about 3.12 million square meter solar water heater collector area and 6.57 lakh solar cookers have been distributed / installed in the country, as on 30.11.2009, under the solar energy programmes. The present cost of electricity generation from solar thermal and solar photovoltaic energy systems is Rs.13.45 and Rs.18.44 per unit respectively, as fixed by Central Electricity Regulatory Commission.

(b) and (c) Solar energy systems are presently not commercially viable due to their high initial costs. Therefore, the Ministry has been providing various fiscal and financial incentives for promotion of such systems. These incentives include capital and interest subsidies. The Ministry is also supporting research & development in this sector through academic institutions, research organizations and industry, to improve the efficiency, increase the life and reduce the costs of such systems. As a result of research and development efforts and volume production, the costs of solar energy systems are declining gradually.

Potential of solar and wind energy

†2724. SHRI LALIT KISHORE CHATURVEDI: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the potential of wind energy, solar energy and tidal wave energy, state-wise and service-wise;

(b) the potential of wind and solar energy exploited and being generated in Rajasthan;

(c) the cost to be incurred thereon and contribution of the State and the Central Government thereto;

(d) the potential proposed to be utilized in the State during the next five years; and

†Original notice of the question was received in Hindi.